

Environmental Protection Agency

§ 86.1830-01

Fuel Economy Test (HWFET; 40 CFR part 600, subpart B). The oxides of nitrogen emissions measured during such tests must represent the full useful life emissions in accordance with § 86.1823-08(f) and subsequent model year provisions. Those results are then rounded and compared with the applicable emission standard in § 86.1811-04. All data obtained from the testing required under this paragraph (d) must be reported in accordance with the procedures for reporting other exhaust emission data required under this subpart.

(2) In the event that one or more emission data vehicles fail the applicable HWFET standard in § 86.1811-04, the manufacturer may submit to the Administrator engineering data or other evidence showing that the system is capable of complying with the standard. If the Administrator finds, on the basis of an engineering evaluation, that the system can comply with the HWFET standard, he or she may accept the information supplied by the manufacturer in lieu of the test data.

(3) The provisions of paragraphs (d)(1) and (d)(2) of this section do not apply to MDPVs.

[64 FR 23925, May 4, 1999, as amended at 65 FR 6864, Feb. 10, 2000; 65 FR 59975, Oct. 6, 2000; 66 FR 5193, Jan. 18, 2001; 66 FR 19310, Apr. 13, 2001; 70 FR 72929, Dec. 8, 2005; 71 FR 2836, Jan. 17, 2006; 72 FR 8566, Feb. 26, 2007; 75 FR 25689, May 7, 2010; 76 FR 19874, Apr. 8, 2011]

§ 86.1830-01 Acceptance of vehicles for emission testing.

(a) *General test vehicle requirements.* (1) All test vehicles shall be tested in the proper configurations as specified in § 86.1822-01, § 86.1828-01, or § 86.1842-01, as applicable for the type of test conducted.

(2) Components affecting emissions which are used to build test vehicles shall either be randomly selected production parts or parts verified to be in the middle 50 percent of the tolerance range. The manufacturer will determine which components affect emissions using good engineering judgment.

(3) Test vehicles must have air conditioning installed and operational if that configuration is available with air conditioning. Optional equipment must be installed or represented on test ve-

hicles according to the provisions of § 86.1832-01.

(4) Test vehicles must receive proper scheduled maintenance as established by the manufacturer according to the provisions of § 86.1834-01(b) or (c). Un-scheduled maintenance must be approved under the provisions of § 86.1834-01(d).

(5) Vehicle mileage shall be accumulated in accordance with § 86.1831-01.

(6) The road load forces and equivalent test weight used during testing will be determined according to the provisions of § 86.129-00.

(7) Test vehicles shall have the appropriate emission testing hardware installed (e.g., exhaust pipe testing flange, fuel tank drain, access ports to evaporative canisters, and fuel tank heat blanket) and shall have tires with appropriate tire wear.

(b) *Special provisions for durability data vehicles.* (1) For DDV's, the mileage at all test points shall be within 250 miles of the scheduled mileage point as required under § 86.1823-08(c)(3). Manufacturers may exceed the 250 mile upper limit if there are logistical reasons for the deviation and the manufacturer determines that the deviation will not affect the representativeness of the durability demonstration.

(2) For DDV's aged using the standard or a customized/alternative whole-vehicle cycle, all emission-related hardware and software must be installed and operational during all mileage accumulation after the 5000-mile test point.

(3) DDV's may be reconfigured before the 5000-mile test point providing that the representativeness of the emission results will not be affected. Manufacturers shall use good engineering judgment in making such determinations.

(c) *Special provisions for emission data vehicles.* (1) All EDV's shall have at least the minimum number of miles accumulated to achieve stabilized emission results according to the provisions of § 86.1831-01(c).

(2) Within a durability group, the manufacturer may alter any emission data vehicle (or other vehicles such as current or previous model year emission data vehicles, running change vehicles, fuel economy data vehicles, and

development vehicles) in lieu of building a new test vehicle providing that the modification will not impact the representativeness of the vehicle's test results. Manufacturers shall use good engineering judgment in making such determinations. Development vehicles which were used to develop the calibration selected for emission data testing may not be used as the EDV for that configuration. Vehicles from outside the durability group may be altered with advance approval of the Administrator.

(3) Components used to reconfigure EDV's under the provisions of paragraph (c)(2) of this section must be appropriately aged if necessary to achieve representative emission results. Manufacturers must determine the need for component aging and the type and amount of aging required using good engineering judgment.

(4) Bench-aged hardware may be installed on an EDV for emission testing as a method of determining certification levels (projected emission levels at full or intermediate useful life) using bench aging procedures under the provisions of § 86.1823.

[64 FR 23925, May 4, 1999, as amended at 71 FR 2836, Jan. 17, 2006]

§ 86.1831-01 Mileage accumulation requirements for test vehicles.

(a) *Durability Data Vehicles.* (1) The manufacturer must accumulate mileage on DDV's using the procedures in § 86.1823.

(2) All tests required by this subpart on durability data vehicles shall be conducted within 250 miles of each of the nominal test point mileage. This ± 250 mile test point mileage tolerance may be modified with the advance approval of the Administrator if the basis for the written request is to prevent an interruption of durability mileage accumulation due to test scheduling conflicts for weekends, holidays, or other similar circumstances.

(b) *Emission data vehicles and running change vehicles.* (1) The standard method of mileage accumulation for emission data vehicles and running change vehicles is mileage accumulation using either the Standard Road Cycle specified in appendix V to this part or the

Durability Driving Schedule specified in appendix IV to this part.

(2) The manufacturer may use an alternative mileage accumulation method providing the form and extent of the service accumulation represents normal driving patterns for that vehicle, the method is consistent with good engineering judgment, and the method is described in the application for certification.

(3) Except with the advance approval of the Administrator, all vehicles will accumulate mileage at a measured curb weight which is within 100 pounds of the estimated curb weight. If the loaded vehicle weight is within 100 pounds of being included in the next higher inertia weight class as specified in § 86.129, the manufacturer may elect to conduct the respective emission tests at higher loaded vehicle weight.

(c) The manufacturer shall determine the mileage at which the emission control system and engine combination is stabilized for emission-data testing. The manufacturer shall provide to the Administrator if requested, a record of the analysis used in making this determination. The manufacturer may elect to accumulate 2,000 miles (3,219 kilometers) or more on each test vehicle without making a determination. The manufacturer must accumulate a minimum of 1,000 miles (1,608 kilometers) on each emission data vehicle.

(d) All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator upon request.

[64 FR 23925, May 4, 1999, as amended at 71 FR 2836, Jan. 17, 2006]

§ 86.1832-01 Optional equipment and air conditioning for test vehicles.

For test vehicles selected under §§ 86.1822-01 and 86.1828-01:

(a)(1) Where it is expected that more than 33 percent of a car line, within a test group, will be equipped with an item (whether that item is standard equipment or an option), the full estimated weight of that item must be included in the curb weight computation for each vehicle available with that item in that car line, within that test group.

(2) Where it is expected that 33 percent or less of the car line, within a